STATEMENT OF CONSIDERATIONS

REQUEST BY PRAXAIR, INC. FOR AN ADVANCE WAIVER OF PATENT RIGHTS UNDER ITS SUBCONTRACT WITH THE GLASS TECHNOLOGY INSTITUTE UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC36-03GO13092 W(A)-04-079;CH-1258

The Petitioner, Praxair, Inc. (Praxair), has requested an advance waiver of domestic and foreign patent rights for all subject inventions made under the above-identified subcontract by its employees and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title to inventions pursuant to P.L. 96-517, as amended, and National Laboratories. Praxair and various other industrial participants are participating in a teaming arrangement led by the Glass Technology Institute (GTI) to develop a high intensity glass melter based on submerged combustion melting technology. This melter will in turn be used in the melting and homogenization section of an energy-efficient Next Generation Glass Melting System (NGMS).

It is anticipated that the development will be conducted in two phases. In the first phase, a 500-1000 lb./hr. pilot scale submerged combustion glass melter will be developed and tested for use with glass needing relatively little refining. Thereafter, in the next phase, the team expects to develop the fining stage of the NGMS process for the other glasses.

The work under the cooperative agreement is expected to take place over a period of about three years at a total cost of \$6,150,343. GTI is obligated to cost share \$2,168,000, or about 35 percent of the total cost of the project. With respect to Praxair's subcontract, the total cost of the work under that agreement is \$229,859, of which Praxair has agreed to cost share \$30,000. However, GTI has requested DOE waive title to subject inventions made by Praxair's employees and its subcontractors to Praxair based on GTI's 35 percent cost sharing.

It is anticipated that Praxair and its subcontractors will develop an appropriate allocation of patent rights among the participants to facilitate the expeditious development of the technology forming the subject matter of the agreement. Accordingly, DOE will waive title to all subject inventions made by Praxair and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title pursuant to P.L. 96-517, as amended, or National Laboratories, to Praxair or its subcontractors, as mutually agreed by the parties. Except as otherwise approved in writing by DOE Patent Counsel, a party's acceptance of a subcontract under this subcontract, at any tier, shall constitute Praxair's certification that it has provided that party with a copy of this Statement of Considerations and that party's notice to DOE that it accepts the terms and conditions of this advance waiver. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

Referring to Praxair's waiver petition, Praxair is an industry leader in the development of oxy-fuel combustion technologies. This clearly demonstrates the likelihood that Praxair and its industrial partners will continue development and commercialization of the results of this agreement.

This advance waiver of the Government's rights in inventions is subject to the attached advance patent waiver provisions and the government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance patent waiver also includes a U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The contractor further agrees to make the above

condition binding on any assignee, licensee or other entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

Referring to item 9 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition as there are numerous commercial alternatives in the relevant market of this technology.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement in a fashion which will make the technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

Thomas G. Anderson
Assistant Chief Counsel
Office of Intellectual Property Law

Date: 3/11/05

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:

David E. Rodgers, Director

Office of the Industrial Technology

Program, EE-2F

Date: 5-9-05

APPROVAL:

Paul A. Gottlieb

Assistant General Counsel for

Technology Transfer and Intellectual

Property, GC-62

Date